A  Mass Balance for Douglas Fir Woodchip Pretreatment (160°C)

1. Ionic liquid Pretreatment
   - 70.0 g Pretreated biomass
   - Liquid

    2. Enzymatic Saccharification
       - 28.6 g Residue

       3. Saccharification (50°C, 72 h)
          - 10% solids loading
          - 20 mg protein/g glucan (Ctec 2)
          - 4.5 mg protein/g mannan (Htec 2)

       4. Enzymatic Saccharification
          - 35.6 g glucan
          - 0.8 g xylan
          - 3.5 g galactan
          - 0.8 g mannan
          - 0.5 g arabinan
          - 21.7 g lignin

       5. Residue
          - 4.6 g glucose
          - 8.5 g mannose
          - 1.7 g xylan
          - 1.8 g galactose
          - 0.4 g arabinose
          - 3.2 g lignin

B  Mass Balance for Forestry Residue Pretreatment (160°C)

1. Ionic liquid Pretreatment
   - 65 g Pretreated biomass
   - Liquid

    2. Enzymatic Saccharification
       - 30.8 g Residue

       3. Saccharification (50°C, 72 h)
          - 10% solids loading
          - 20 mg protein/g glucan (Ctec 2)
          - 4.5 mg protein/g mannan (Htec 2)

       4. Enzymatic Saccharification
          - 27.2 g glucan
          - 2.0 g mannose
          - 1.7 g xylan
          - 1.8 g galactose
          - 0.4 g arabinose
          - 3.2 g lignin

       5. Residue
          - 4.6 g glucose
          - 6.6 g mannose
          - 0.8 g galactose
          - 0.5 g xylose
          - 2.4 g lignin